## **AARYA CHANDHOK**

1141 Lakeside Court, Naperville, IL 60564 - 1012 W Illinois St, Room 708, Urbana, IL 61801 Cell: (630) 608-3224 - Home: (630) 219-3221

aarvac2@illinois.edu

## **EDUCATION**

Bachelors of Science [Engineering Undeclared] - University of Illinois at Urbana-Champaign - Class of 2021

[Expecting to transfer to Computer Science in Spring 2018]

GPA: 4.00/4.00

Neuqua Valley High School

GPA cumulative - 4.20/4.00

National Merit Commended Scholar

Composite ACT score – 35 [99 percentile]

AP Scholar with Distinction [2 years out of 2 years possible]

#### RELEVANT WORK EXPERIENCE

- Leading Teacher's Assistant for Computer Science at Neuqua Valley High School for Mr. Koos, School Year 2016- 2017
  - Wrote quiz questions to challenge the class, assisted in teaching fundamental concepts in computer science, and helped students during class hours
- Lung Cancer Research at the University of Illinois at Chicago, Summer of 2015-2016
  - Cloned mutated DNA using the polymerase-chain reaction process, and transfected plasmids (grown within bacteria) to cells
  - Used the Electrophoresis method to determine success rate of mutated DNA 'attachment' to plasmids
  - Gave a presentation over the role of Hexokinase 2 in lung cancer to the head of the department and to the research laboratory that supported my study after a 3-week long research timeframe
    - Cloned 4 different types of DNA, transfected them into cells, and made a hexokinase assay of the cell groups (with variance for normoxia and hypoxia conditions)
    - Can provide a copy of the presentation as a reference.
- Worked as an intern at Naperville Children's Clinic, July 2016- August 2016
  - Designed and improved patient records filing system and was put in charge of transferring patient records from analog to digital storage
- Intern at Smiles of Naperville (Dental Clinic), August 2015- March 2016
  - Assisted Dentist and Hygienist in patient services- learned procedures in basic dental surgery and dental hygiene

# **ACADEMIC PROJECT EXPERIENCES**

- Capstone classes in the Project Lead the Way Engineering Spectrum at Neuqua Valley High School.
  - Designed and prototyped a piston-lift wheelchair to assist people with entering/exiting a car.
  - Worked with the CEO of the engineering firm 'Beyond Design' to leverage his expertise in building the prototype.
- 3-week intense course in robotics conducted at MIT in Cambridge, MA (conducted by an external training agency) over the summer vacation of 2014.
  - Designed a created a robotic arm that had 5 degrees of motion and lifted a weight of 3 pounds.
  - Won the 'Best Project' award
- Member of the High School Robotics Team for 2 years, over which time I got my team to the state level based on the autonomous code I wrote for the Vex robot

## **SKILLS**

- Proficient in Java
- Experience with C#, Python, HTML, CSS programming and the Linux operating system
- Experience with circuit design and deployment involving integrated circuit chips, logic gates, and microprocessors
- Experience with standard biomedical procedures in research labs, including the PCR process, DNA cloning, and transfection
- Experience with prototyping products, market research, maintaining professional relationships, and presenting to conferences